

AMENDMENT TO THE CLAIMS

1. (Currently amended) A method for providing fault tolerant checkpoint data within a server cluster comprising a production server and a plurality of backup servers, the method comprising:
 - accessing checkpoint data within the production server;
 - distributing the checkpoint data; ~~and~~
 - storing the distributed checkpoint data on the plurality of backup servers
 - accessing the distributed checkpoint data;
 - reassembling the checkpoint data using the distributed checkpoint data; and
 - using the checkpoint data to initiate execution of software.
2. (Original) The method of claim 1, wherein the distributing step comprises:
 - creating a redundancy group of checkpoint data; and
 - storing the redundancy group of checkpoint data upon the plurality of backup servers.
3. (Original) The method of claim 2, wherein creating the redundancy group comprises:
 - subsegmenting the checkpoint data; and
 - forming groups of subsegments.
4. (Original) The method of claim 3, wherein the storing step comprises:
 - striping the subsegments across a plurality of backup servers.
5. (Original) The method of claim 2, further comprising:
 - creating parity data for each group.
6. (Original) The method of claim 5, wherein the storing step comprises:
 - striping the subsegments and parity data across a plurality of backup servers.
7. (Original) The method of claim 1, wherein the storing step comprises:
 - mirroring the checkpoint data onto the plurality of backup servers.
8. (Cancelled)

9. (Currently amended) A system for providing fault tolerant checkpoint data comprising:
- a production server for generating checkpoint data;
 - means for forming distributed checkpoint data comprising subsegments of the checkpoint data;
 - a plurality of backup servers for storing the distributed checkpoint data, where each of the backup servers in said plurality of backup servers: (i) stores at least one subsegment of the distributed checkpoint subsegments of the checkpoint data, (ii) accesses the distributed checkpoint data, (iii) reassembles the checkpoint data using the distributed checkpoint data, and (iv) uses the checkpoint data to initiate execution of software.
10. (Currently amended) The system of claim 9, wherein the ~~forming~~-means for forming the distributed checkpoint data is located within the production server.
11. (Currently amended) The system of claim 9, wherein the ~~forming~~-means for forming the distributed checkpoint data is located within a backup server within the plurality of backup servers.
12. (Currently amended) The system of claim 9, wherein the ~~forming~~-means for forming the distributed checkpoint data is located within a computer that is separate from the production server or the plurality of backup servers.
13. (Currently amended) The system of claim 9, wherein the means for forming the distributed checkpoint data further comprises:
- means for striping the at least one subsegment[[s]] onto the plurality of backup servers.
14. (Currently amended) An [[A]]apparatus for generating fault tolerant checkpoint data, the apparatus comprising:
- a first server that accesses checkpoint data, segments the checkpoint data, and supplies the segments of checkpoint data to a plurality of second servers[[.]].

wherein the first server produces parity data for the segments of checkpoint data and supplies the parity data to the plurality of second servers.

15.(Cancelled)

16.(Original) The apparatus of claim 14 wherein the segments of check point data are supplied to the plurality of second servers in a striped manner.

17.(Currently amended) A method of generating fault tolerant checkpoint data, the method comprising:

accessing checkpoint data that is produced by a first server;

segmenting the forming distributed checkpoint data having at least one segment of checkpoint data; and

supplying the ~~segments of~~ distributed checkpoint data to a plurality of second servers

accessing the distributed checkpoint data;

reassembling the checkpoint data using the distributed checkpoint data; and

using the checkpoint data to initiate execution of software.

18.(Currently amended) The method of claim 17, further comprising:

generating parity data for the at least one segment[[s]] of checkpoint data; and

supplying the parity data to the plurality of second servers.

19.(Currently amended) The method of claim 17, further comprising: supplying the at least one segment[[s]] of checkpoint data to the plurality of second servers in a striped manner.

20.(New) A method for providing fault tolerant checkpoint data within a server cluster comprising a production server and a plurality of backup servers, the method comprising:

accessing checkpoint data within the production server;

distributing the checkpoint data, wherein distributing the checkpoint data comprises:

creating a redundancy group of checkpoint data, wherein creating the redundancy group comprises:

- subsegmenting the checkpoint data; and
- forming groups of subsegments.; and

storing the redundancy group of checkpoint data upon the plurality of backup servers;

creating parity data for each group of the groups of subsegments; and

storing the distributed checkpoint data on the plurality of backup servers, wherein storing the distributed checkpoint data comprises: striping the subsegments and parity data across a plurality of backup servers.

21.(New) The method of claim 20, wherein storing the distributed checkpoint data comprises: mirroring the checkpoint data onto the plurality of backup servers.